

BASIC NAVIGATION RULES

“The Rules of the Road”

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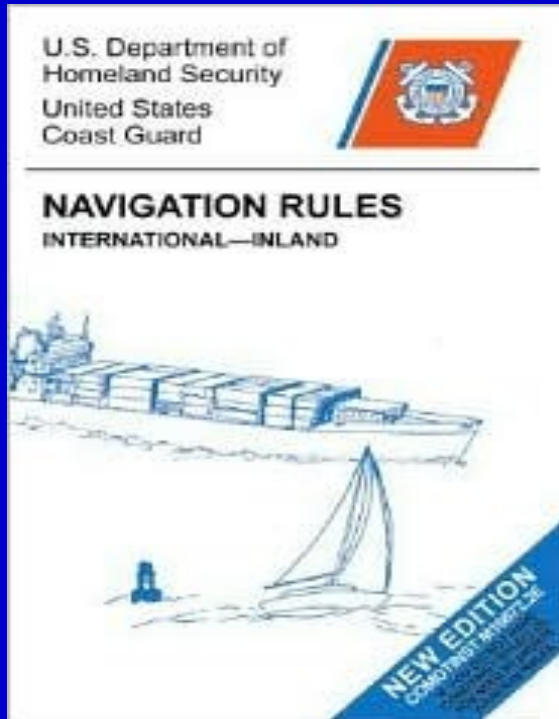
OBJECTIVES:

- Learn the purpose of “Rules”
- Learn Navigational terms
- Learn to interpret navigation lights
- Learn the basic Navigation Rules

for crossing, meeting & overtaking situations.

- To stay awake!

Where do the rules come from?



“Navigation Rules”

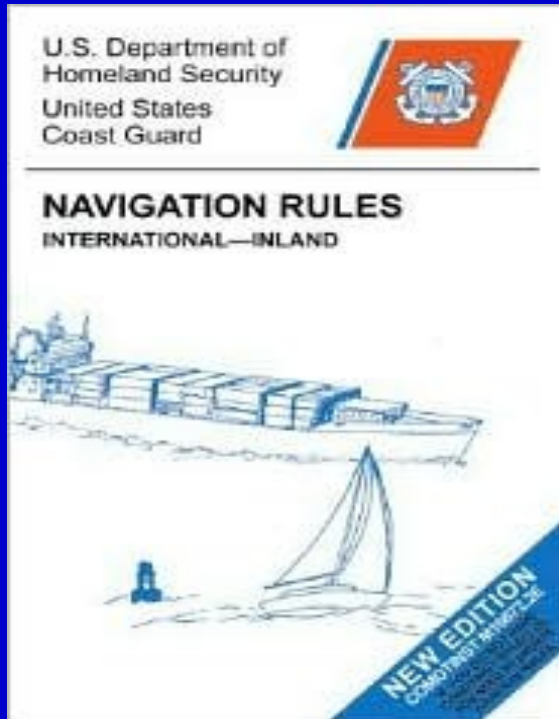
Are published by the U.S.

Department of Homeland Security for the United States Coast Guard

- *"Never memorize what you can look up in books."*

Albert Einstein

What is the purpose of the Rules?



To protect
against loss of
life, injury, and
property damage
as a result of
collision.

In other words to
prevent accidents

Most Common Accident



Collision with another vessel

Second most common

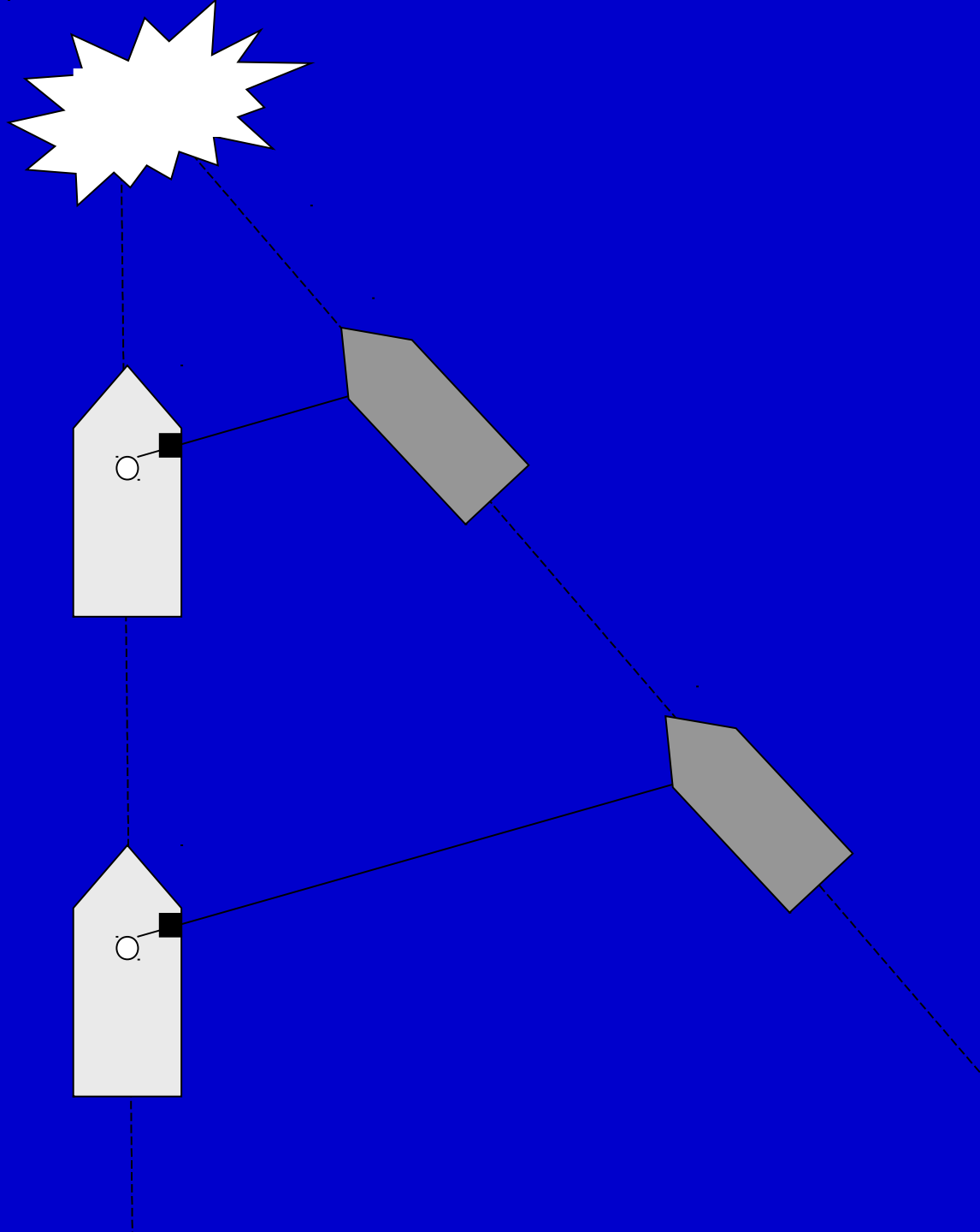


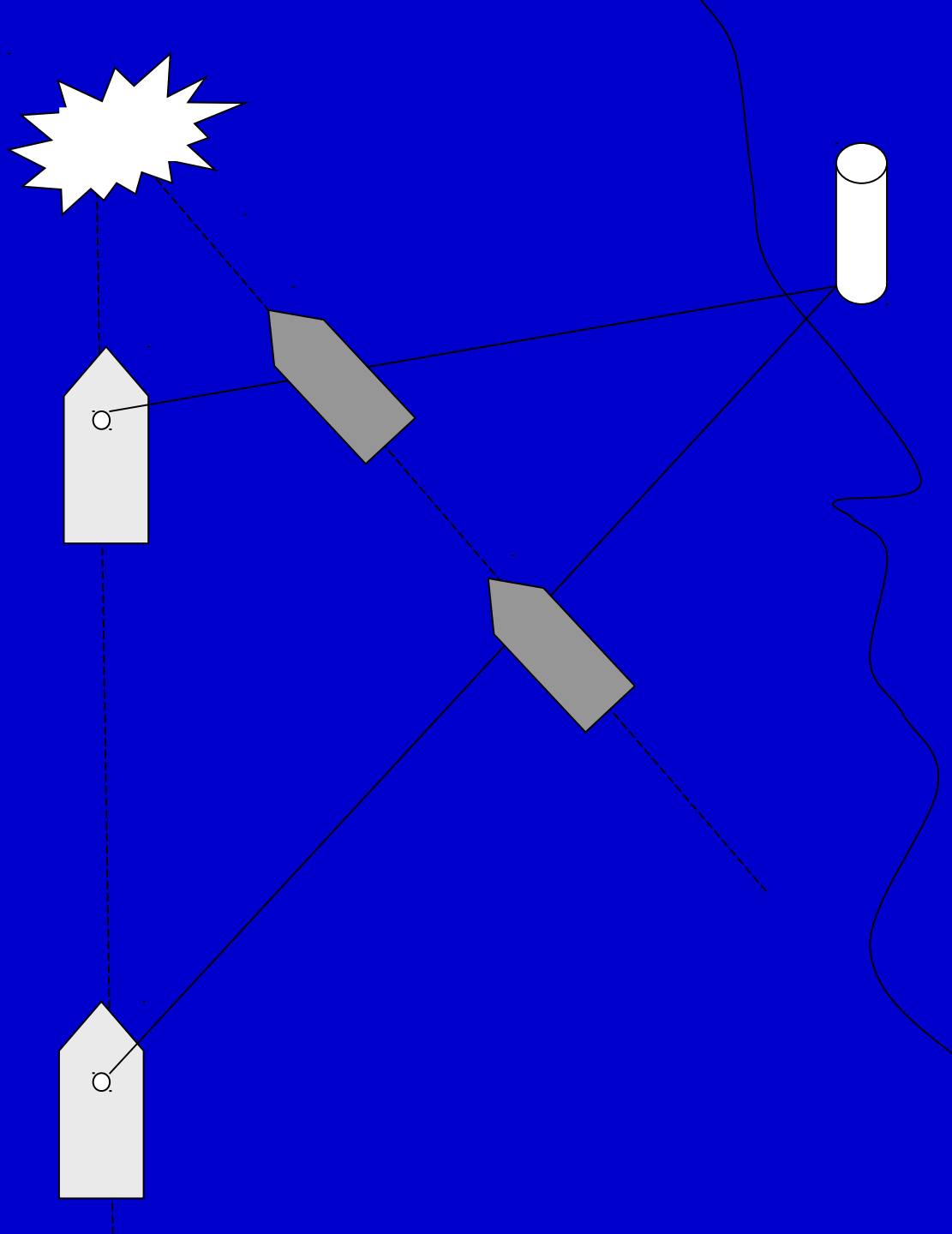
Collision with a fixed object

Most common cause



***Failure to keep proper
lookout***





Accidents

Most collisions could be avoided
by:

- Proper use of a “lookout”
- Knowledge of “Rules of the Road”
- Knowledge of proper boat lighting
- Knowledge of “Aids to Navigation”

Ground Rules for Navigation

Definitions &
Responsibility

Navigation Rules Definitions

- **Underway** - not at anchor, aground or attached to the dock or shore
- **Danger Zone** – an arc of 112.5 degrees measured from dead ahead to just aft of the starboard beam
- **Right-of-way** – the right and duty to maintain course and speed

Navigation Rules Definitions

- **Stand-On Vessel** - vessel that has right-of-way
- **Give-Way Vessel** – the vessel that must keep clear of the stand-on vessel
- **Visible** (when applied to lights) – visible on a dark, clear night
- **Short Blast** – a blast of approximately one-second duration
- **Prolonged Blast** – a blast of four to six seconds

Operator Responsibility

Vessel

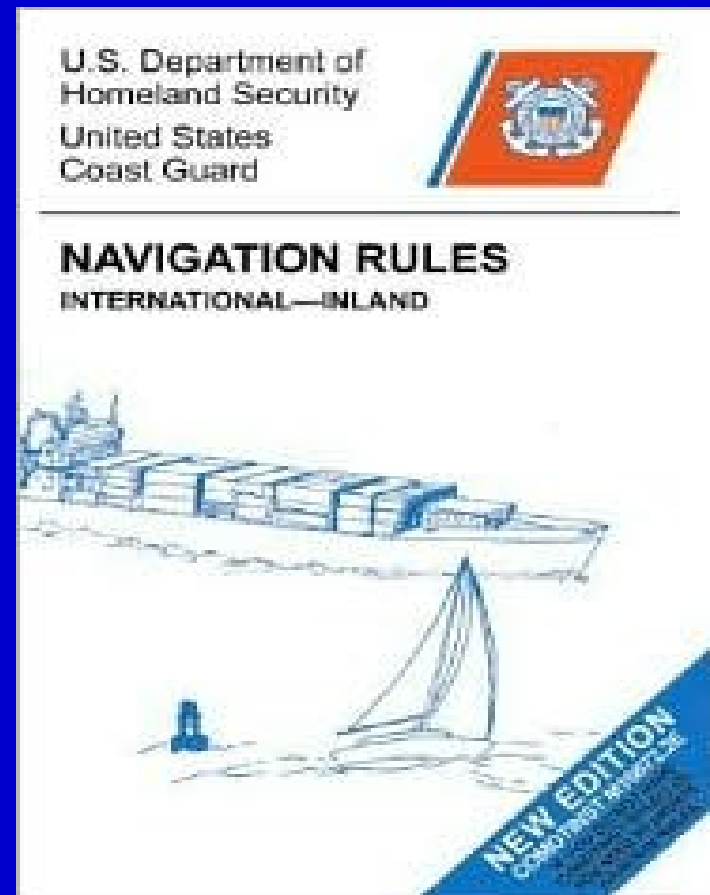
(Operation, maintenance, Safety, and Wake)

All occupants

Final Authority

Responsibility Rule

Allows for departure from the Rules of the Road if necessary



Here lies the body of Michael O'Day,
He died maintaining the right of way.
He was right, dead right, as he sailed along.
Now he's just as dead as if he'd been wrong.

“Rules of the Road” Meeting Situations

- Overtaking
- Head-On
- Crossing

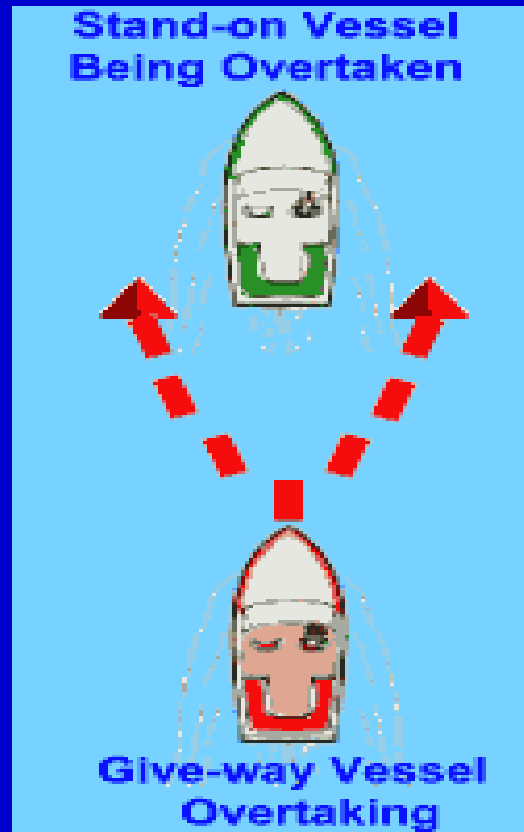
Rules of the Road

- **Overtaking Rule (Rule 13)**

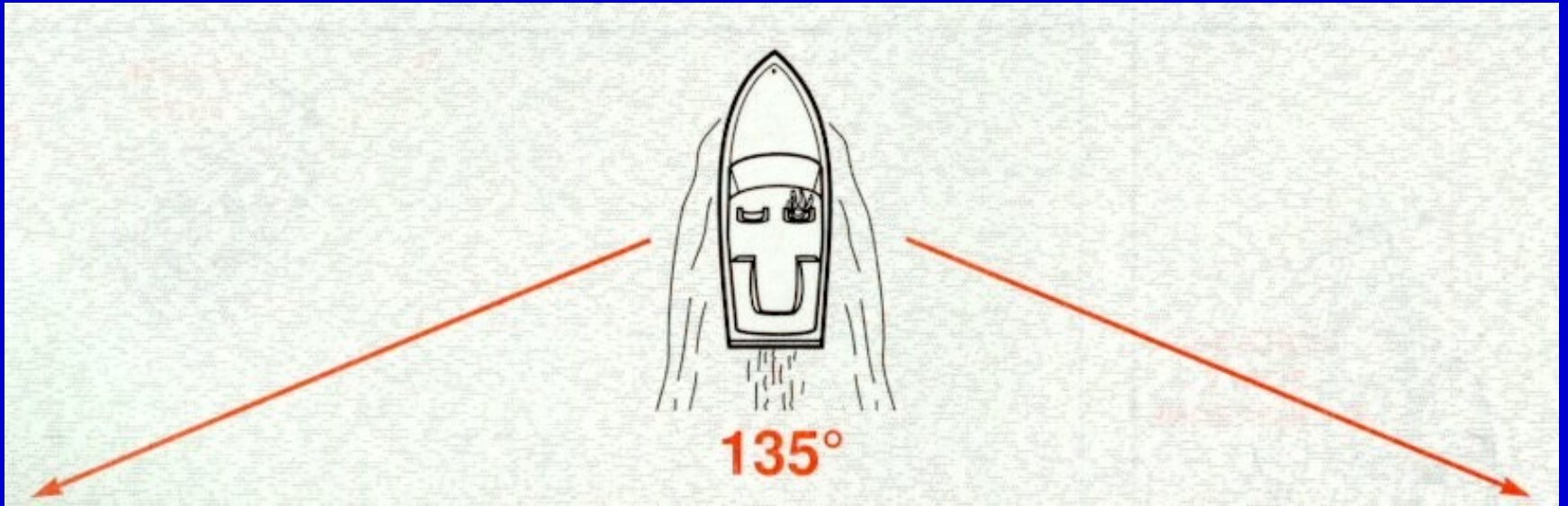
- A vessel is being overtaken if you are within the Arc of visibility of its stern light only (135 degrees across the stern)
- Vessel being overtaken is the stand-on vessel
- The overtaking, give-way vessel, is required to sound whistle signals to indicate how it proposes to pass the other vessel

Rules of the Road

Overtaking Rule (Rule 13)



When are you overtaking?



If you're in this area you are overtaking

Remember

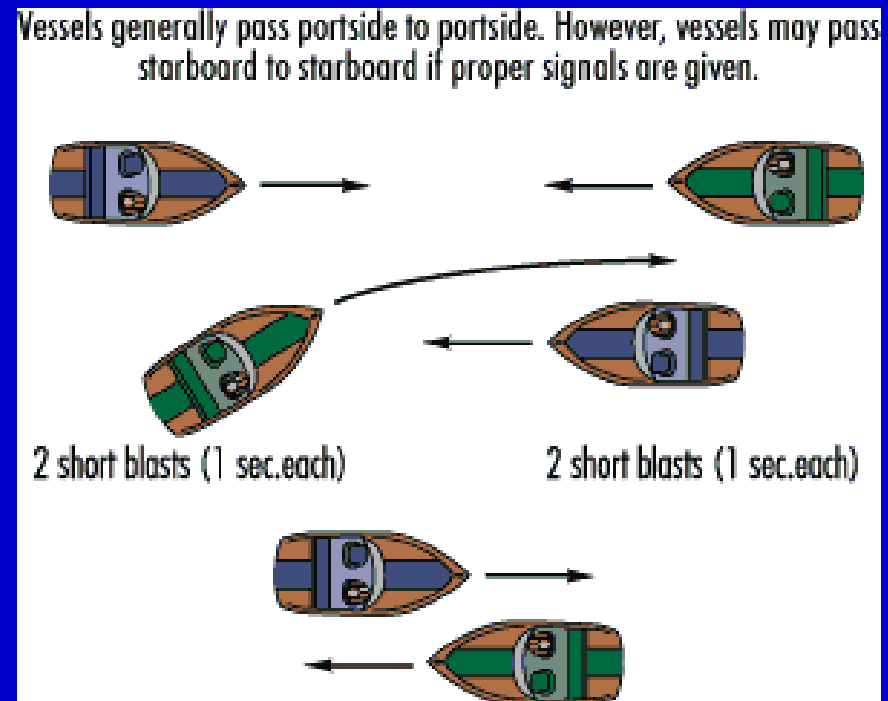
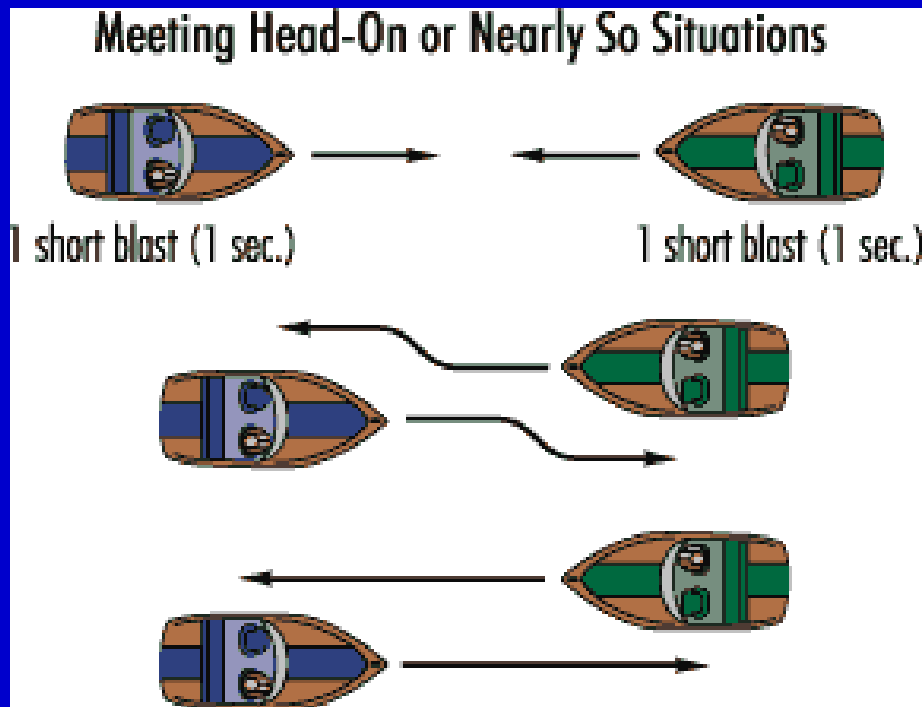
*If you start out overtaking,
you continue to be the “Give
Way” until there’s no risk of
collision
(even past the 135° mark).*

Rules of the Road

- **Head-on situation (Rule 14)**
 - A meeting situation exists if you are in the arc of visibility of both sidelights and/or its masthead lights are in the line or nearly so
 - Neither vessel has the right-of-way
 - Whistle signals are required, either can initiate
 - Alter course to starboard so that each pass **port to port**
 - May pass starboard to starboard when both agree after exchanging proper signals

Rules of the Road

Head-on situation (Rule 14)



Rule does not apply if the two vessels will pass clear of each other if each maintains course and speed

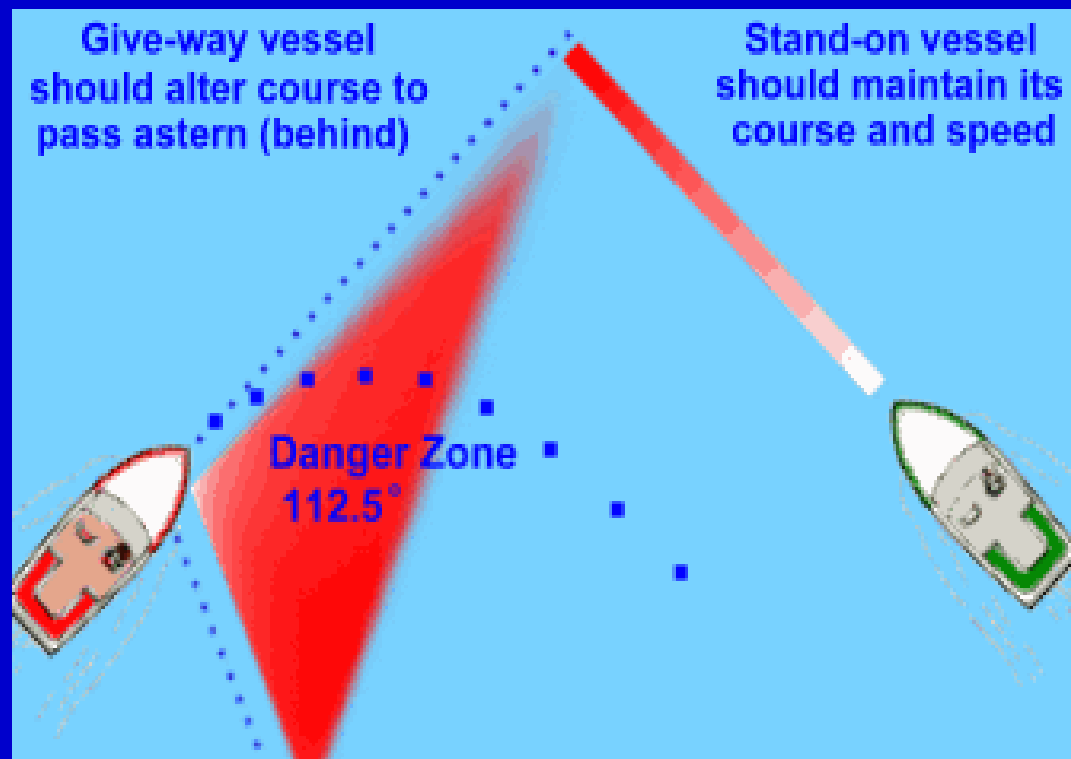
Rules of the Road

- **Crossing Situation (Rule 15)**

- A crossing situation exists if you are with the arc of visibility of either sidelight of the other vessel
- The give-way vessel is the one that “sees red”, has the other vessel on its starboard side
- The stand-on vessel should initiate whistle signals to propose action

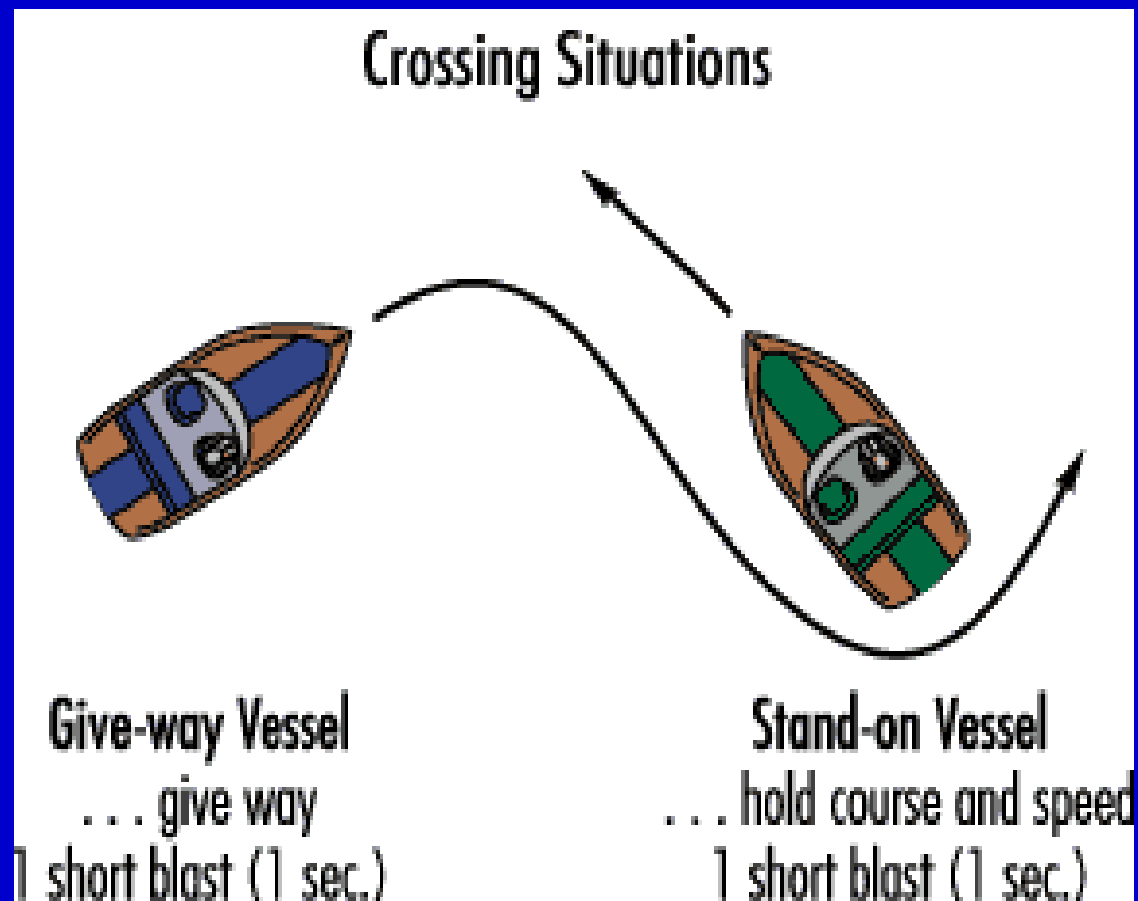
Rules of the Road

Crossing Situation (Rule 15)



Rules of the Road

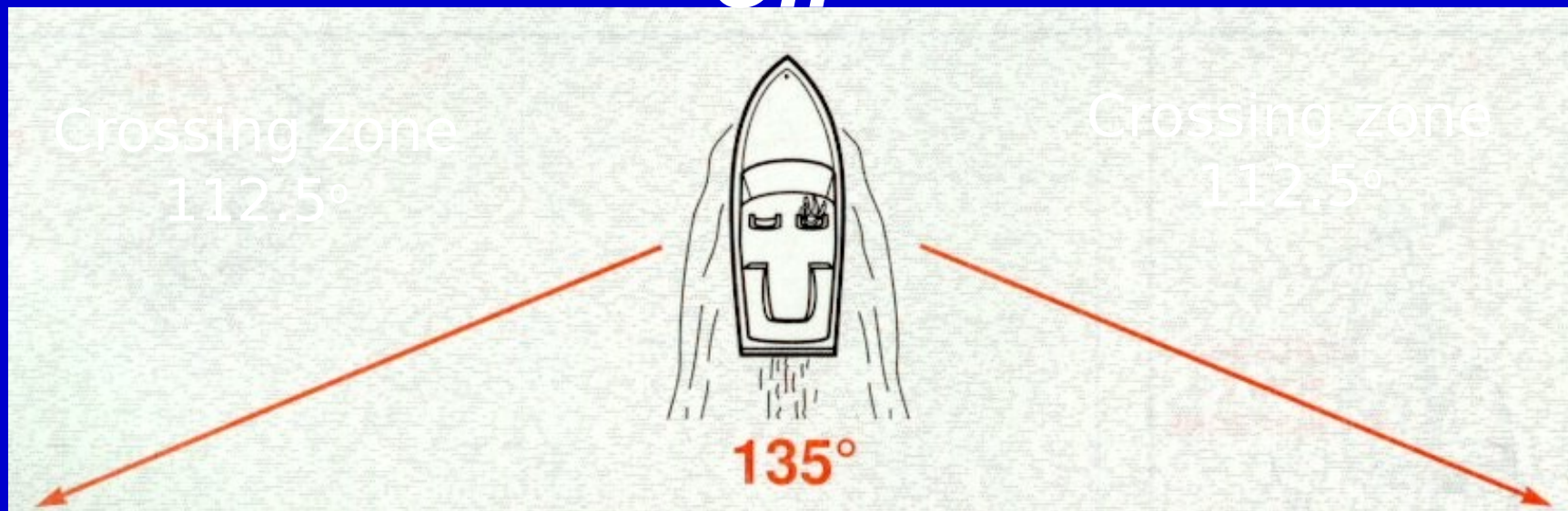
Crossing Situation (Rule 15)





Crossing Situation

*If not
Head
On*



If not Here

Equal on Hierarchy and Crossing



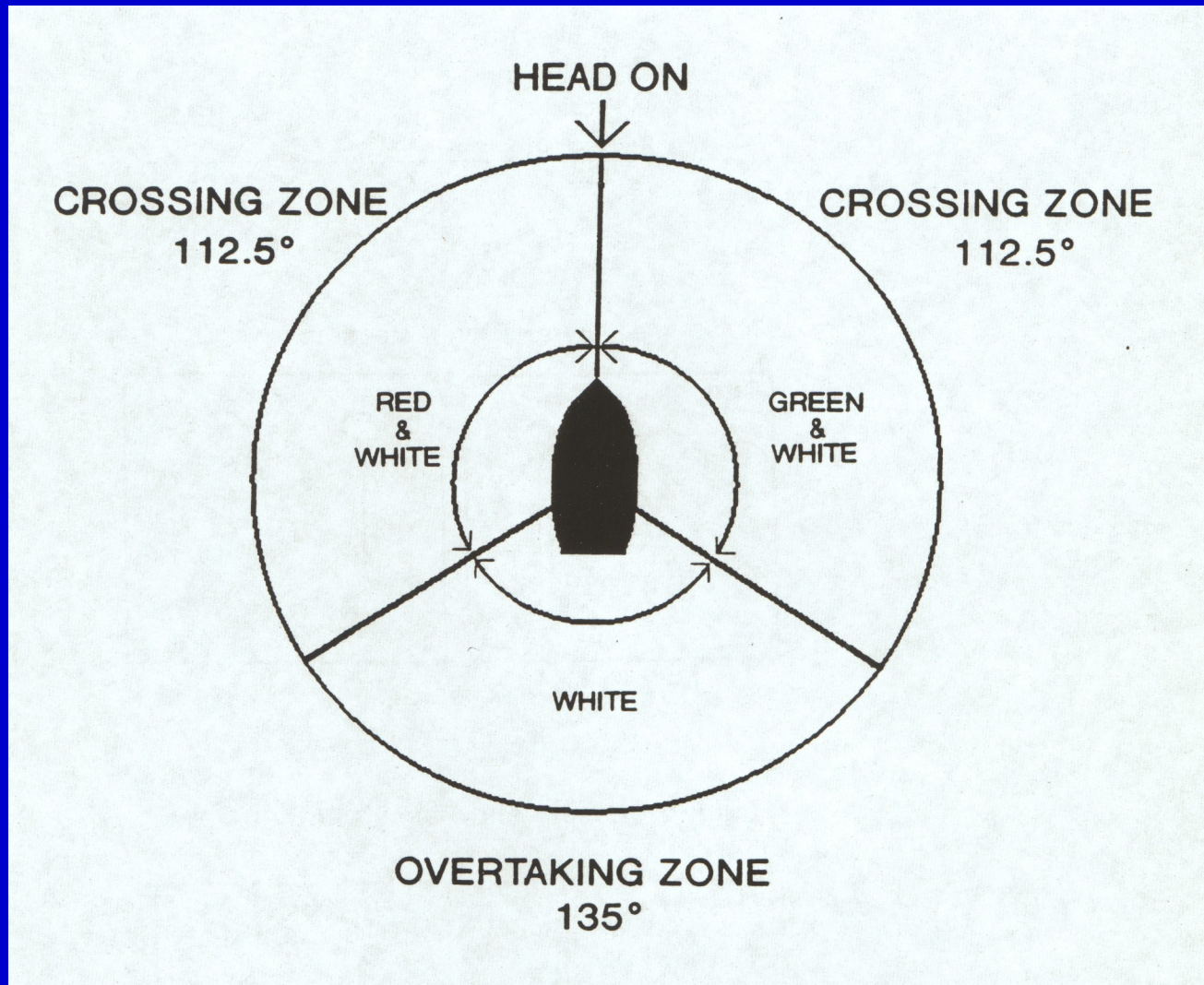
If you see this...

Equal and Crossing



If you see this.....

Remember -



Rules of the Road

**Responsibility between Vessels
(Rule 18)**

“Vessel Hierarchy”

Vessel not under Command













Rules of the Road

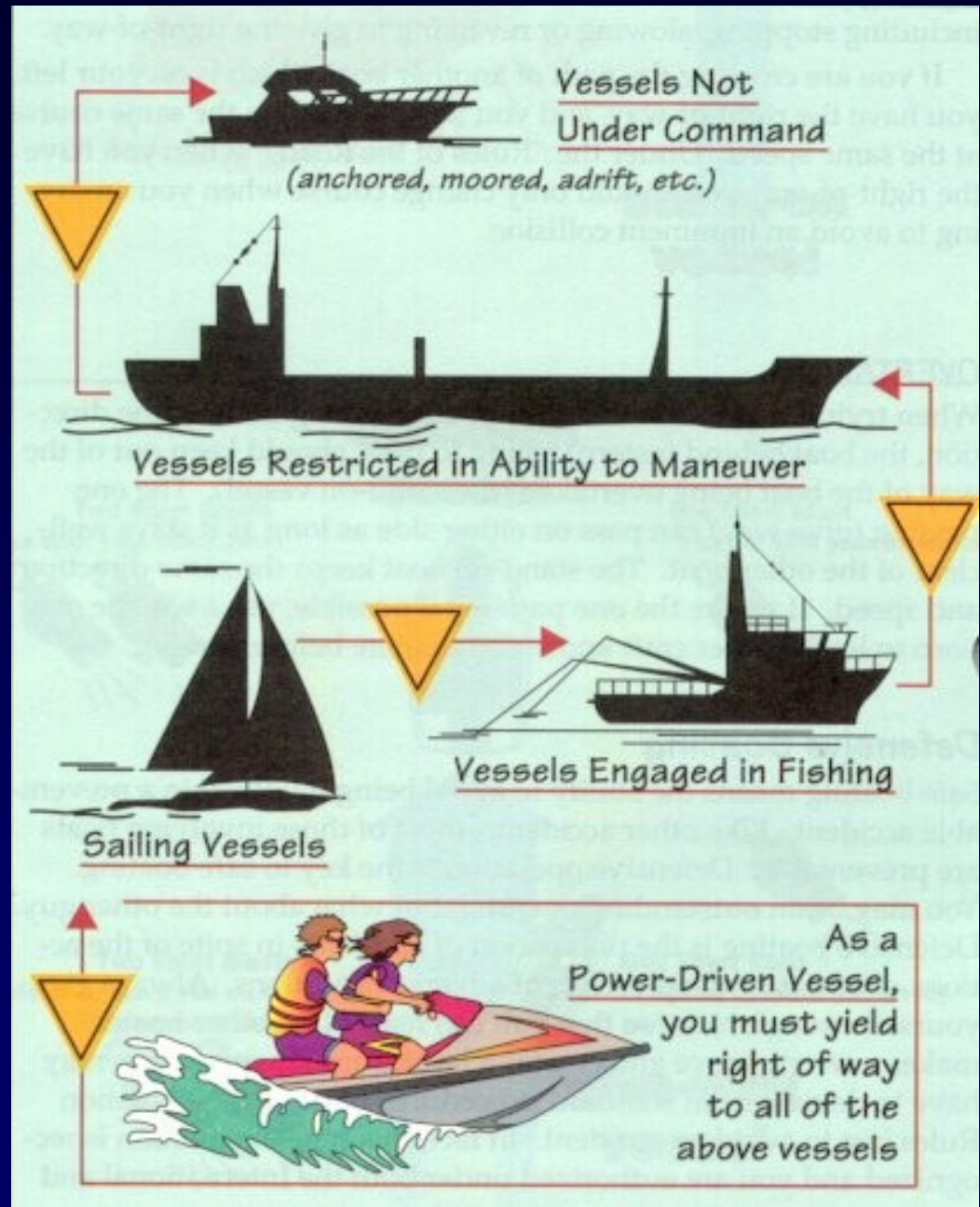
- **Responsibility between Vessels (Rule 18)**

“Vessel Hierarchy” based on maneuverability and draft

- **Vessel not under command** - unable to maneuver
- **Vessel restricted in ability to maneuver** – due to nature of work, etc.
- **Vessel engaged in fishing** – gear that restricts ability to maneuver (trawlers)
- **Sailing vessel** – vessel under sail, not propelled by machinery
- **Power-driven vessel** – vessel propelled by machinery
- **Seaplane**

Vessel Hierarchy

*Maneuverability
based on size,
draft, and/or
activity*

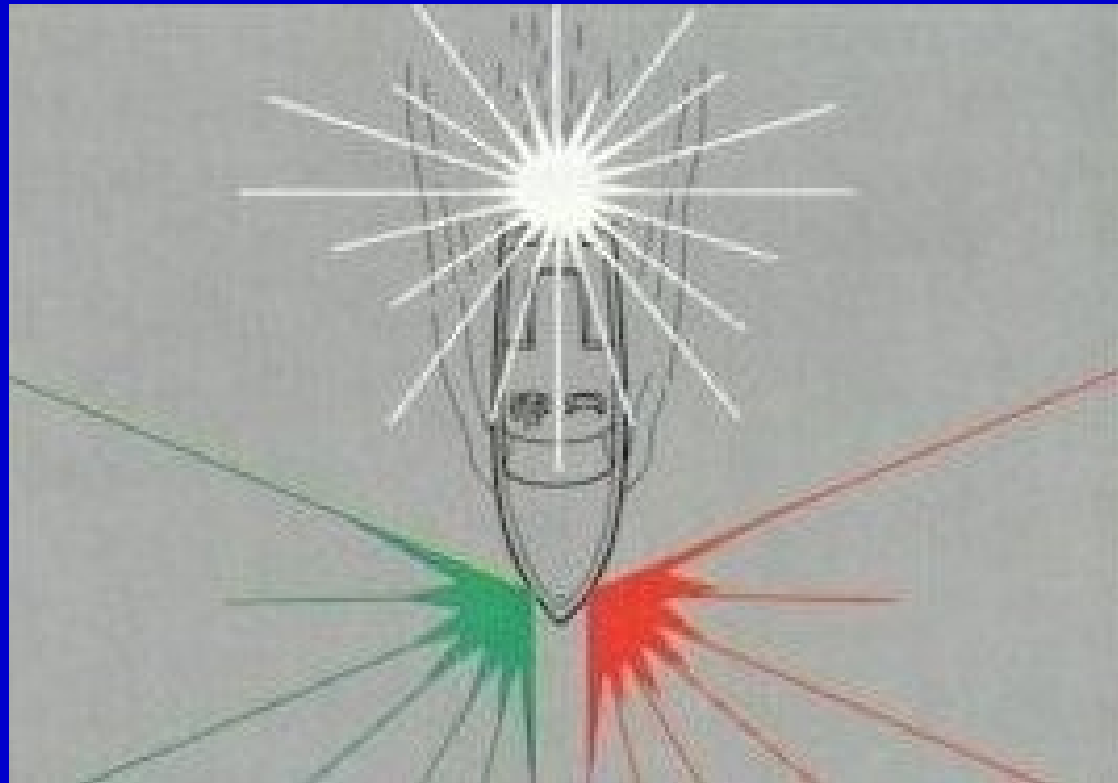


Rules of the Road

- **Maneuvering and Warning Signals (Rule 34)**
 - **1 short blast** – I intend to leave you on my port side
 - **Two short blasts** – I intend to leave you on my starboard side
 - **Three short blasts** – I am operating astern propulsion
 - **Five short blasts** – Danger, I don't understand your signal, or am in doubt that sufficient action is being taken
 - **One prolonged blast** – obstructed visual signal, used for blind bends or leaving a dock/berth

Rules of the Road

Restricted Visibility – Night-time Navigation



Rules of the Road

Restricted Visibility – Night-time Navigation

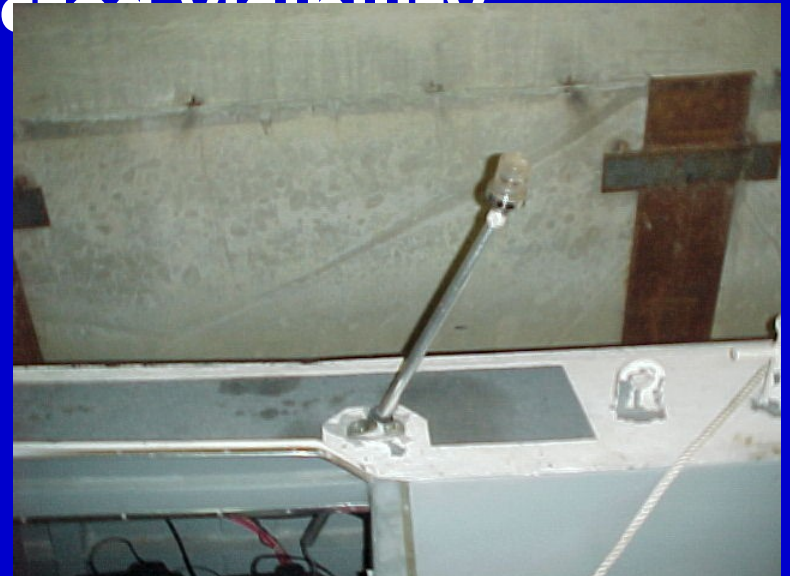
When you see both red and green colors of the bow light, YOU ARE IN A COLLISION HEAD-ON COURSE!



Navigation Lights

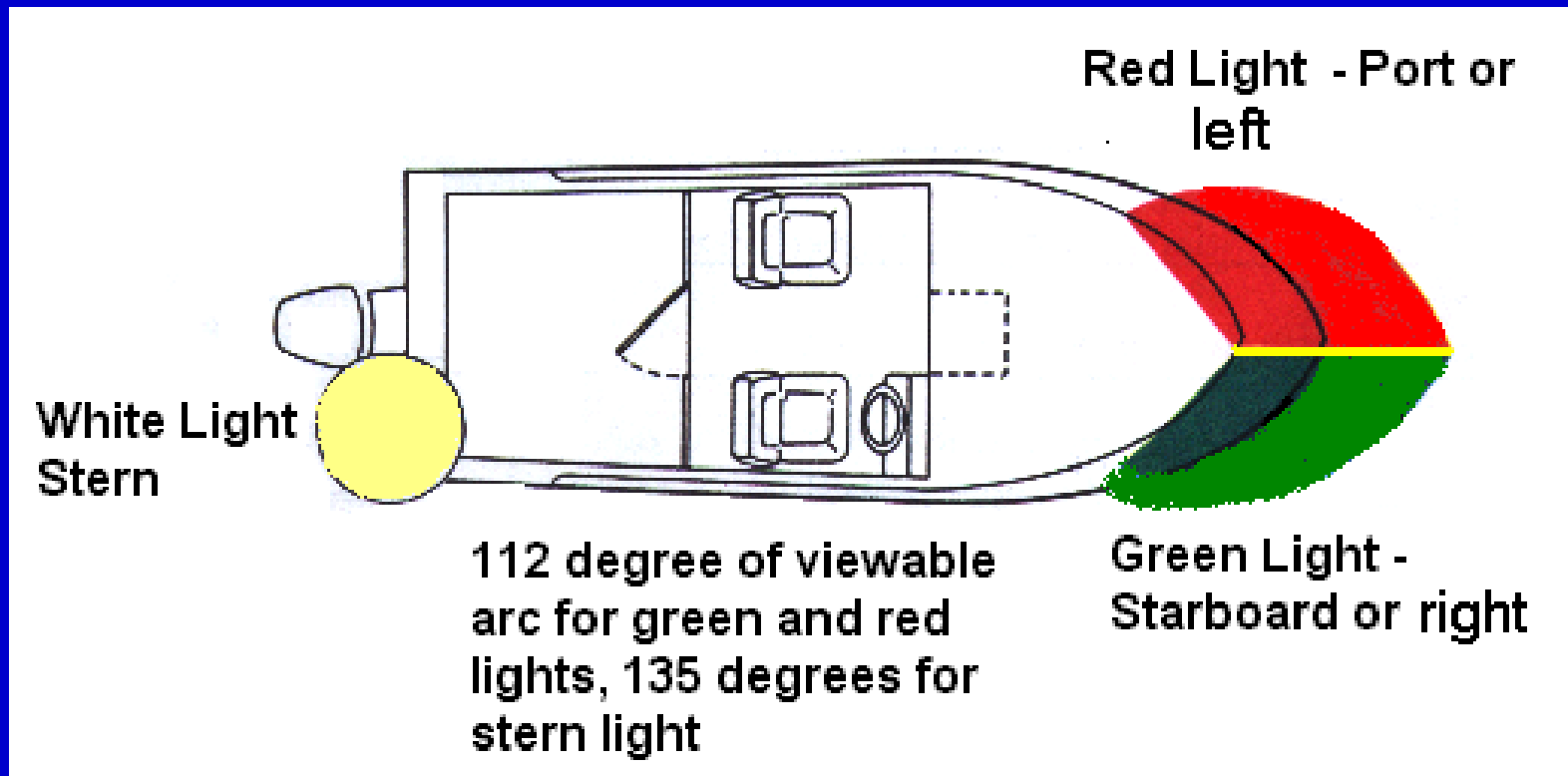
Specific lighting configurations are required for vessels:

- **operating between sunset and sunrise**
- **in times of restricted visibility**



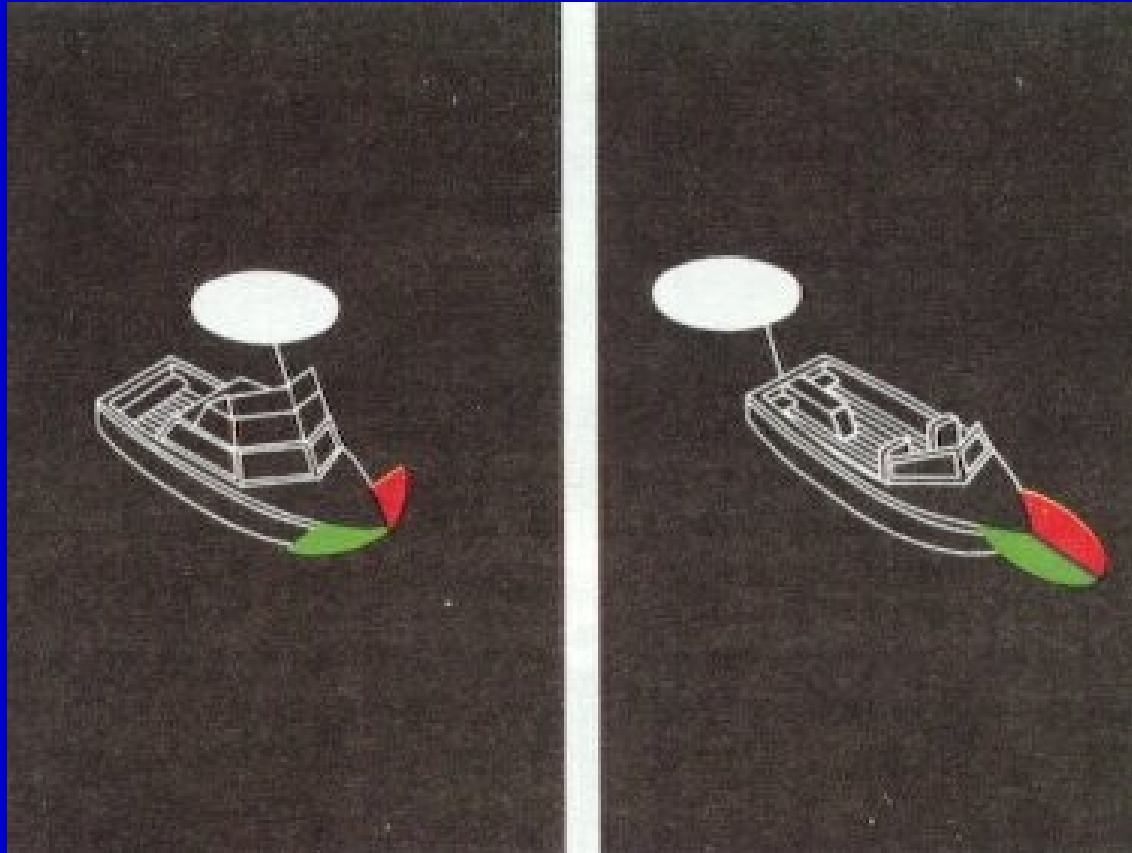
Navigation Lights

- White 360 degree light required when anchored
- Red and Green lights (112 degree arc each) required when underway between sunset and sunrise or in restricted visibility



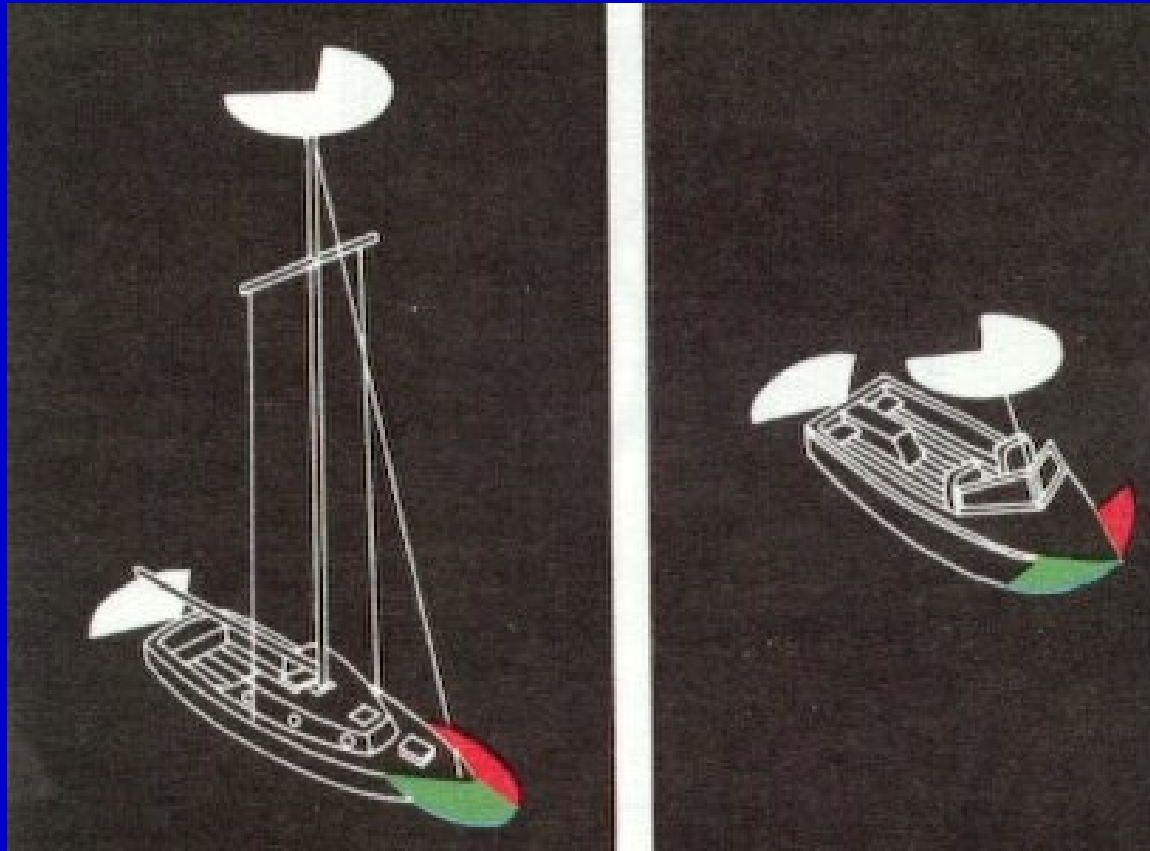
Configurations

Class A-1 Under Power



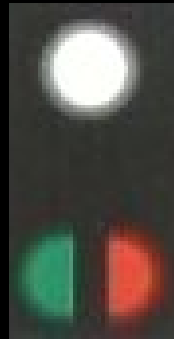
Configurations

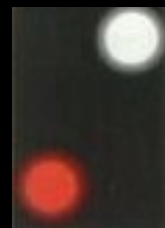
Class A-1 Under Power

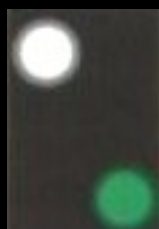


Practice

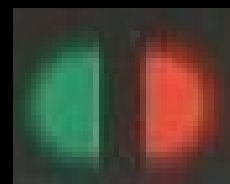




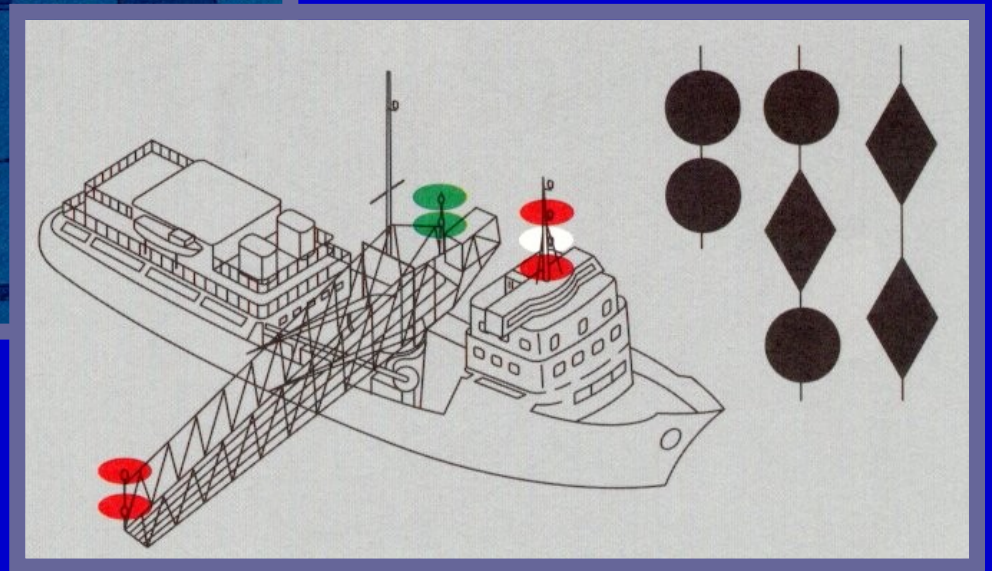
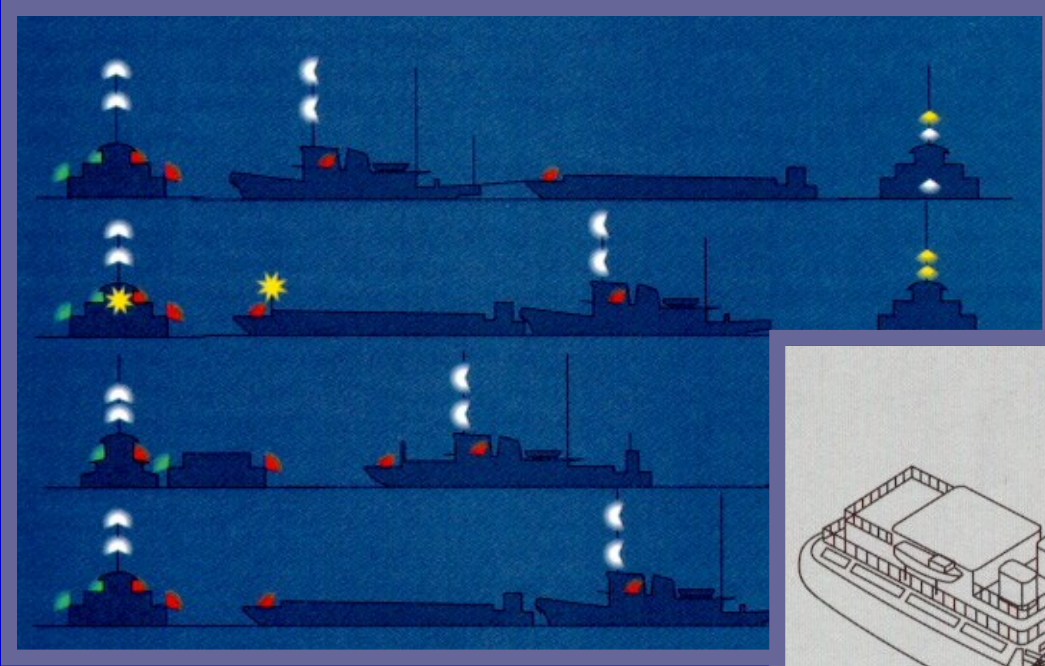








Other lights & Day shapes



Navigation Lights

- Navigation lights should be checked prior to departing the dock
- Always carry spare bulbs